

## 7.0 GLOSSARY

**aboriginal** - Related to early or primitive cultures in a region.

**alluvial valley floor (AVF)** - An area of unconsolidated stream-laid deposits holding streams with water availability sufficient for subirrigation or flood irrigation agricultural activities (see 30 CFR 701.5).

**alternative** - In terms of the National Environmental Policy Act, one of several substitute or alternate proposals that a federal agency is considering in an environmental analysis.

**ambient** - Surrounding conditions (or environment) in a given place and time.

**annual precipitation** - The quantity of water that falls yearly in the form of rain, hail, sleet, and snow.

**approximate original contour** - Post-mining surface configuration achieved by backfilling and grading of mined-out areas so that the reclaimed land surface resembles the general surface configuration of the land prior to mining (see 30 CFR 701.5).

**aquatic** - Living or growing in or on the water.

**aquifer** - A layer of permeable rock, sand, or gravel that stores and transmits water in sufficient quantities for a specific use.

**ash** - The residual non-combustible matter in coal that comes from included silt, clay, silica, or other substances. The lower the ash content, the better the quality of the coal.

**buffer zone** - An area between two different land uses that is intended to resist, absorb, or otherwise preclude development or intrusion between the two use areas.

**clinker (scoria)** - Baked and fused rock resulting from in-place burning of coal deposits.

**contiguous** - Lands or legal subdivisions having a common boundary, lands having only a common corner are not contiguous.

**cooperating agency** - An agency which has jurisdiction by law in an action being analyzed in an environmental document and who is requested to participate in the NEPA process by the agency that is responsible for preparing the environmental document [see 40 CFR 1501.6 and 1508.5].

**Coteau Properties Company** – a subsidiary of The North American Coal Corporation, is engaged in the mining of coal used by electric utilities for power generation and by a

coal gasification facility. Coteau's Freedom Mine in Beulah, North Dakota, began mining in 1983. Freedom Mine delivers over 16 million tons of coal per year, making it the largest lignite mine in the United States in deliveries. The operation utilizes two Bucyrus-Erie 2570 draglines for overburden removal and reclaims about 600 acres of land annually.

**cultural resources** - The remains of human activity, occupation, or endeavor reflected in districts, sites, structures, buildings, objects, artifacts, ruins, works of art, architecture, and natural features that reveal the nature of historic and prehistoric human events. These resources consist of (1) physical remains, (2) areas where important human events occurred, and (3) the environment immediately surrounding the resource.

**cumulative impact** - The impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.7).

**deciview (dV)** - A general measure of view impairment (13 deciview equals a view of approximately 60 miles) caused by pollution.

**direct (primary) impact** - An impact caused by an action that occurs at the same time and place as the action (see 40 CFR 1508.8).

**discharge** - Any of the ways that ground water comes out of the surface, including through springs, creeks, or being pumped from a well.

**dragline** - A type of excavating crane that casts a rope- or cable-hung bucket a considerable distance, collects the dug material by pulling the bucket toward itself on the ground with a second rope or cable, elevates the bucket, and dumps the material on a backfill bank or pile.

**ecosystem** - A system formed by the interaction of a community of organisms with their environment.

**edaphic** - Related to or caused by particular soil conditions.

**erratic** - a rock fragment carried by a glacier or by floating ice and deposited when the ice melted at some distance from the outcrop from which the fragment was derived.

**erosion** - The wearing away of the land surface by running water, wind, ice or other geologic agents.

**excavation (archeological)** - The scientifically controlled recovery of subsurface materials and information from a cultural site. Recovery techniques are relevant to research problems and are designed to produce maximum knowledge about the site's use, its relation to other sites and the natural environment, and its significance in the maintenance of the cultural system.

**fair market value** - The amount in cash, or in terms reasonably equivalent to cash, for which in all probability a coal deposit would be sold or leased by a knowledgeable owner willing but not obligated to sell or lease to a knowledgeable purchaser who desires but is not obligated to buy or lease.

**fen** - A waterlogged, spongy groundmass containing alkaline, decaying vegetation characterized by reeds and which may develop into peat. It sometimes occurs in the sinkholes of karst regions. Cf: bog.

**floodplain** - The relatively flat area or lowland adjoining a body of flowing water, such as a river or stream, which is covered with water when the river or stream overflows its banks.

**forage** - Vegetation used for food by wildlife, particularly big game wildlife, and domestic livestock.

**glacial till** - Material deposited from glaciers consisting of an unsorted mixture of clay, sand, gravel, and boulders.

**ground water** - Subsurface water that fills available openings in rock or soil materials to the extent that they are considered water saturated.

**habitat** - A place where a plant or animal naturally or normally lives and grows.

**HABS/HAER** - Historic American Building Survey/Historic American Engineering Record

**hazardous waste** - Those materials defined in Section 101 (14) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980, and listed in 40 CFR § 261.

**Historic Property** - A site that has been determined eligible for or is listed on the National Register of Historic Places.

**human environment** - The natural and physical environment and the relationship of people with that environment (see 30 CFR 1508.14).

**hydraulic conductivity** - The capacity of a medium to transmit water; permeability coefficient. Expressed as the volume of water at the prevailing temperature that will move in unit time under a unit hydraulic gradient through a unit

area. Units include gallons per day per square foot, centimeters per second.

**hydraulic** - Pertaining to fluid in motion, or to movement or action caused by water.

**in-place coal reserves** - The estimated volume of all of the coal reserves in a lease without considering economic or technological factors that might restrict mining.

**interdisciplinary** - Characterized by participation or cooperation among two or more disciplines or fields of study.

**intermittent stream** - A stream that does not flow year-round but has some association with ground water for surface or subsurface flow.

**lease (mineral)** - A legal document executed between a mineral owner or lessor and another party or lessee which grants the lessee the right to extract minerals from the tract of land for which the lease has been obtained [see 43 CFR 3400.0-5(r)].

**lignite** - A soft coal, usually dark brown and often having a woody texture.

**loam** - A rich, permeable soil composed of a mixture of clay, silt, sand, and organic matter.

**maintenance tract** - A federal coal tract that would continue or extend the life of an existing coal mine.

**maximum economic recovery (MER)** - The requirement that, based on standard industry operating practices, all profitable portions of a leased federal coal deposit must be mined. MER determinations will consider existing proven technology; commercially available and economically feasible equipment; coal quality, quantity, and marketability; safety, exploration, operating, processing, and transportation costs; and compliance with applicable laws and regulations [see 43 CFR 3480.0-5(a) (24)].

**methane** - A colorless, odorless, and inflammable gas; the simplest hydrocarbon; chemical formula = CH<sub>4</sub>. It is the principal constituent of natural gas and is also found associated with crude oil and coal.

**mineable coal** - Coal that can be economically mined using present day mining technology.

**mining permit** - A permit to conduct surface coal mining and reclamation operations issued by the state regulatory authority pursuant to a state program or by the Secretary pursuant to a federal program (see 30 CFR 701.5).

**mitigation** - An action to avoid, minimize, reduce, eliminate, replace, or rectify the impact of a management practice.

**National Register of Historic Places (NRHP)** - A list of districts, sites, buildings, structures and objects important in American history, architecture, archeology and culture maintained by the Secretary of the Interior. Expanded as authorized by Section 2(b) of the Historic Sites Act of 1935 (16 U.S.C. 462) and Section 101(a) (1) (A) of the National Historic Preservation Act.

**NEPA process** - All measures necessary for compliance with the National Environmental Policy Act of 1969 (see 40 CFR 1508.21).

**No Action alternative** - An alternative where no activity would occur. The development of a No Action alternative is required by regulations implementing the National Environmental Policy Act (40 CFR 1502.14). The No Action alternative provides a baseline for estimating the effects of other alternatives.

**outcrop** - A rock formation that appears at or near the surface; the intersection of a rock formation with the surface.

**overburden** - Material of any nature, consolidated or unconsolidated, that overlies a coal or other useful mineral deposit, excluding topsoil.

**perennial species (vegetation)** - Vegetation that lives over from season to season.

**perennial stream** - A stream or part of a stream that flows continuously during the calendar year as a result of groundwater discharge or surface runoff.

**permeability** - The ability of rock or soil to transmit a fluid.

**permit application package** - A proposal to conduct surface coal mining and reclamation operations on federal lands, including an application for a permit, permit revision, or permit renewal and all the information required by SMCRA, the applicable state program, any applicable cooperative agreement, and all other applicable laws and regulations including, with respect to federal leased coal, the Mineral Leasing Act and its implementing regulations.

**permit area** - The area of land, indicated on the approved map submitted by the operator with his or her application, required to be covered by the operator's performance bond under the regulations at 30 CFR Part 800 and which shall include the area of land upon which the operator proposes to conduct surface coal mining and reclamation operations under the permit, including all disturbed areas (see 30 CFR 701.5).

**point source (pollution)** - A point at which pollution is added to a system, either instantaneously or continuously. An example is a smokestack.

**prime and unique farmland** - Those lands, which are defined by the Secretary of Agriculture in 7 CFR, part 657 (*Federal Register* Vol. 4 No. 21) and which have historically been used for cropland (see 30 CFR 701.5).

**Programmatic Agreement and Management Plan** - Documents developed following the Section 106 process of the National Historic Preservation Act of 1966, as amended (NHPA). The programmatic agreement is a promise by the signatures to complete certain preservation tasks as elaborated in the management plan for cultural resources to comply with the NHPA. These documents were developed in consultation between BLM, The Coteau Properties Company, The Advisory Council on Historic Preservation, the State Historic Preservation Office, the North Dakota Public Service Commission, the Office of Surface Mining and Reclamation, the Three Affiliated Tribes, Fort Peck Assiniboine and Sioux, the Standing Rock Sioux Tribe, and others.

**proposed action** - In terms of National Environmental Policy Act, the project, activity, or action that a federal agency proposes to implement or undertake and which is the subject of an environmental analysis.

**qualified surface owner** - The natural person or persons (or corporation, the majority stock of which is held by a person or persons otherwise meeting the requirements of this section) who:

- (1) Hold legal or equitable title to the surface of split estate lands,
- (2) Have their principal place of residence on the land, or personally conduct farming or ranching operations upon a farm or ranch unit to be affected by surface mining operations; or received directly a significant portion of their income, if any, from such farming and ranching operations; and
- (3) have met the conditions of (1) and (2) above for a period of at least three years, except for persons who gave written consent less than three years after they met the requirements of both (1) and (2) above [see 43 CFR 3400.0-5(gg)].

**raptor** - Bird of prey, such as an eagle, falcon, hawk, owl, or vulture.

**recharge** - The processes by which groundwater is absorbed into a zone of saturation.

**reclamation** - Rehabilitation of a disturbed area to make it acceptable for designated uses. This normally involves regrading, replacement of topsoil, revegetation and other work necessary to restore the disturbed area for post-mining use.

**record of decision (ROD)** - A document separate from, but associated with, an environmental impact statement that

publicly and officially discloses the responsible official's decision on the proposed action (see 40 CFR 1505.2).

**recoverable coal** - The amount of coal that can actually be recovered for sale from the demonstrated coal reserve base.

**resource management plan (RMP)** - A land use plan, as prescribed by FLPMA that directs the use and allocation of public lands and resources managed by BLM. Prior to selection of the RMP, different alternative management plans are compared and evaluated in an environmental impact statement (EIS) to determine which plan will best direct the management of the public lands and resources.

**revegetation** - The reestablishment and development of self-sustaining plant cover following land disturbance. This may occur through natural processes, or the natural processes may be enhanced by human assistance through seedbed preparation, reseeding, and mulching.

**riparian** - The area adjacent to rivers and streams that lies between the stream channel and upland terrain and that supports specific vegetation influenced by perennial and/or intermittent water.

**runoff** - That portion of rainfall that is not absorbed; it may be used by vegetation, lost by evaporation, or it may find its way into streams as surface flow.

**scoping** - A public informational process required by the National Environmental Policy Act to determine private and public concerns, scope of issues, and/or questions regarding a proposed action to be evaluated in an environmental impact analysis.

**scoria (clinker)** - Baked and fused rock resulting from in-place burning of coal deposits.

**sedimentation pond** - An impoundment used to remove solids from water in order to meet water quality standards or effluent limitations before the water leaves the permit area (see 30 CFR 701.5).

**semi-arid** - A climate or region characterized by little yearly rainfall and by the growth of a number of short grasses and shrubs.

**shale** - A very fine-grained clastic rock or sediment consisting predominately of clay-sized particles that is laminated, lithified, layered mud.

**significant impact** - A qualitative term used to describe the anticipated importance of impacts to the human environment as a result of an action.

**socioeconomics** - The social and economic situation that might be affected by a proposed action.

**soil survey** - The systematic examination, description, classification, and mapping of soils in an area, usually a county. Soil surveys are classified according to the level of detail of field examination. Order I is the most detailed and Order V is the least detailed.

**spontaneous combustion** - The heating and slow combustion of coal and coaly material initiated by the absorption of oxygen.

**steppe** - Referring to extensive plains dominated by grasses.

**stipulations** - Requirements that are part of the terms of a mineral lease. Some stipulations are standard on all federal leases. Other stipulations may be applied to specific leases at the discretion of the surface management agency to protect valuable surface resources or uses existing on those leases.

**surface disturbance** - Any disturbance by mechanical actions that alters the soil surface.

**threatened and endangered (T&E) species** - These species of plants or animals classified as threatened or endangered pursuant to section 4 of the Endangered Species Act. Any species, which is in danger of extinction, or is likely to become so within the foreseeable future.

**topography** - Physical shape of the ground surface; the configuration of land surface including its relief, elevation, and the position of its natural and manmade features

**transpiration** - The discharge of water vapor by plants.

**truck & shovel** - A mining method used to remove overburden and coal in a strip mining operation. Truck and shovel operations use large bucket-equipped digging and loading machines (shovels) and large dump trucks to remove overburden instead of using a dragline for overburden removal.

**Trust** - North Dakota's Indian Cultural Education Trust . North Dakota Century Code Chapter 15 Education Number 68. Is a State trust managed by the State Board of University and School Lands for the expressed purpose of generating income to benefit Indian culture.

**unconfined aquifer** - An aquifer where the water table is exposed to the atmosphere through openings in the overlying materials.

**unsuitability criteria** - The 20 criteria described in 43 CFR 3461, the application of which results in an assessment of federal coal lands as suitable or unsuitable for surface coal mining.

**wakan** - anything that is old or has existed for along time so that it should be accepted because it has been so in former

times. It may mean a strange or wonderful thing or something that cannot be comprehended. It may mean a sacred or supernatural thing.

**waterfowl** - A bird that frequents water, especially a swimming bird.

**watershed** - The region or area drained by a river, stream, etc.; drainage area.

**West Mine Area** - A 17,000-acre parcel west of the Coteau's Freedom Mine that is being analyzed for surface mining operations. Approximately 5,500 acres of the West Mine Area are underlain by federal coal reserves.

**wetlands** - Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient, under normal circumstances, to support a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands include marshes, bogs, sloughs, potholes, river overflows, mud flats, wet meadows, seeps, and springs [see 33 CFR 328.3(a) (7) (b)].

**wild and scenic river** - Rivers or sections of rivers designated by Congressional actions under the 1968 Wild and Scenic Rivers Act as wild, scenic, or recreational by an act of the Legislature of the state or states through which they flow.

**wilderness** - An area of undeveloped federal land designated wilderness by Congress, retaining its primeval character and influence, without permanent improvements or human habitation, protected and managed to preserve its natural conditions and that (1) generally appears to have been affected primarily by the forces of nature with the imprint of man's work substantially unnoticeable, (2) has outstanding opportunities for solitude or primitive and unconfined recreation, (3) has at least 5,000 acres or is of sufficient size to make practical its preservation and use in an unimpaired condition, and (4) also may contain features that are of ecological, geological, scientific, educational, scenic, or historical value. Congress in the Wilderness Act of 1964 identified these characteristics.

